DETAILED ACTION

EXAMINER'S AMENDMENT

1.   An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Francis Maguire on 11/23/10 and 12/7/10.

a.   Claim 1 should read "A method for use in an equalization of a channel by means of an equalizer, wherein said channel uses a certain frequency band for a transfer of signals, said method comprising:

determining, by a signal processing apparatus, a channel response for at least three frequency points within said frequency band used by said channel; and

setting, by said signal processing apparatus, adjustable coefficients of said equalizer such that an equalizer response compensates the determined channel response at said at least three frequency points;

wherein determining said channel response comprises determining a channel phase response and a channel amplitude response for said channel;

wherein said adjustable coefficients of said equalizer are set such that an equalizer amplitude response approaches an inverse of a determined channel

amplitude response for all considered frequency points and that an equalizer

phase response approaches a negative of a determined channel phase response

for all considered frequency points; and

wherein said setting of adjustable coefficients comprises for an

equalization of phase of said channel setting a complex coefficient as a phase

rotator part of said equalizer, setting at least one coefficient of a non-real

complex allpass filter part of said equalizer, and setting at least one coefficient of

a real allpass filter part of said equalizer."

b.   Claim 3 should read "The method according to claim 1, further comprising

selecting, by said signal processing apparatus, a number of said at least three

frequency points for said channel to correspond to a minimum number which can

be expected to result in a sufficient channel equalization."

c.   Claim 43 should read "A non-transitory computer readable medium

~~software program product~~ in which a software code is stored as an equalizer for

use in an equalization of a channel, wherein said channel uses a certain

frequency band for a transfer of signals, said software code for execution when

running in a signal processing device comprising said equalizer configured to

cause an apparatus to:

determine a channel response for at least three frequency points

within said frequency band used by said channel; and

set at least one adjustable coefficient of said equalizer such that an
equalizer response compensates the determined channel response at said at
least three frequency points;

wherein to determine said channel response comprises to determine a
channel phase response and a channel amplitude response for said channel;

wherein said adjustable coefficients of said equalizer are set such that an
equalizer amplitude response approaches an inverse of a determined channel
amplitude response for all considered frequency points and that an equalizer
phase response approaches a negative of a determined channel phase response
for all considered frequency points; and

wherein to set said at least one adjustable coefficient comprises for an
equalization of phase of said channel to set a complex coefficient as a phase
rotator part of said equalizer, to set at least one coefficient of a non-real complex
allpass filter part of said equalizer, and to set at least one coefficient of a real
allpass filter part of said equalizer."

Conclusion

Any inquiry concerning this communication or earlier communications from the
examiner should be directed to LEON-VIET Q. NGUYEN whose telephone number is
(571)270-1185. The examiner can normally be reached on Monday-Friday, alternate
Friday off, 7:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David C. Payne can be reached on 571-272-3024. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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published applications may be obtained from either Private PAIR or Public PAIR.

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USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Leon-Viet Q Nguyen/
Examiner, Art Unit 2611

/David C. Payne/
Supervisory Patent Examiner, Art Unit 2611